## SEQUENCE LISTING

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<110> Anderson, Christen M.
            Davis, Robert E.
            Clevenger, William
            Wiley, Sandra Eileen
            Willer, Scott W.
            Szabo, Tomas R. Ghosh, Soumitra S.
            Moos, Walter H.
            Pei, Yazhong
      <120> PRODUCTION OF ADENINE NUCLEOTIDE TRANSLOCATOR (ANT),
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                                                                        180
gccagcaaac agatcagtgc tgagaagcag tacaaaggga tcattgattg tgtggtgaga
atccctaagg agcagggctt cctctccttc tggaggggta acctggccaa cgtgatccgt
                                                                        240
                                                                        300
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                                                                        360
ggggccgctg gggccacctc cctttgcttt gtctacccgc tggactttgc taggaccagg
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ttggctgctg atgtgggcag gcgcgcccag cgtgagttcc atggtctggg cgactgtatc
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caaggcatca ttatctatag agctgcctac ttcggagtct atgatactgc caaggggatg
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ctgcctgacc ccaagaacgt gcacattttt gtgagctgga tgattgccca gagtgtgacg
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gcagtcgcag ggctgctgtc ctaccccttt gacactgttc gtcgtagaat gatgatgcag
                                                                        720
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gccagcaagc agatcactgc agataagcaa tacaaaggca ttatagactg cgtggtccgt

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180

240

| tacttccca cccaggctct taacttcgcc ttcaaagata aatacaagca gatcttcctg ggtggtgtgg acaagagaac ccagttttgg cgctactttg cagggaatct ggcatcgggt ggtgccgcag gggccacatc cctgtgtttt gtgtaccctc ttgattttgc ccgtacccgt ctagcagctg atgtgggtaa agctggagct gaaagggaat tccgaggcct cggtgactgc ctggttaaga tctacaaatc tgatgggatt aagggcctgt accaaggctt taacgtgtct gtgcagggta ttatcatcta ccgagccgcc tacttcggta tctatgacac tgcaaaggga atgcttccgg atcccaagaa cactcacatc gtcatcagct ggatgatcgc acagactgtc actgctgttg ccgggttgac ttcctatcca tttgacaccg ttcgccgccg catgatgatg cagtcagggc gcaaaggaac tgacatcatg tacacaggca cgcttgactg ctggcggaag attgctcgtg atgaaggagg caaagctttt ttcaagggtg catggtccaa tgttctcaga ggcatggtg gtgcttttgt gcttgtcttg tatgatgaaa tcaagaagta cacataa  | 300<br>360<br>420<br>480<br>540<br>600<br>660<br>720<br>780<br>840<br>897                     |
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C.J
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             <210> 9
          - - <211>_ 44. _ .
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Ļ.L
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ווֹן
             <220>
Ė.5
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             <400> 9
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                                                                                 18
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<u>Ļ.</u>Ł
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| ggcct  | gttcc gtcatcttat cgtcatcgtc g  | 31     |
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|        | 12237 Hatagenie Oligonaciotiae plimei  |        |
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| cgacga | atgac gataagatga cggaacaggc c  | 31     |
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| 1 5 10 15  Val Ala Ala Ala Val Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val 20 25 30                 |    |

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Lys Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Ser Ala Glu
Lys Gln Tyr Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu
Gln Gly Phe Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
                                    90
Gln Leu Phe Leu Gly Gly Val Asp Arg His Lys Gln Phe Trp Arg Tyr
                                105
Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
                            120
Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
                        135
Val Gly Arg Arg Ala Gln Arg Glu Phe His Gly Leu Gly Asp Cys Ile
                    150
                                         155
Ile Lys Ile Phe Lys Ser Asp Gly Leu Arg Gly Leu Tyr Gln Gly Phe
                                    170
Asn Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe Gly
                                185
                                                     190
Val Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Val His
                            200
Ile Phe Val Ser Trp Met Ile Ala Gln Ser Val Thr Ala Val Ala Gly
                        215
                                            220
Leu Leu Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Gln
                    230
                                        235
Ser Gly Arg Lys Gly Ala Asp Ile Met Tyr Thr Gly Thr Val Asp Cys
                245
                                    250
Trp Arg Lys Ile Ala Lys Asp Glu Gly Ala Lys Ala Phe Phe Lys Gly
            260 -
                               265
                                                     270
Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu Val
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                            280
Leu Tyr Asp Glu Ile Lys Lys Tyr Val
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<212> PRT

<213> Homo sapien

<400> 32

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Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
                        135
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Val Gly Lys Ala Gly Ala Glu Arg Glu Phe Arg Gly Leu Gly Asp Cys
                                        155
                    150
Leu Val Lys Ile Tyr Lys Ser Asp Gly Ile Lys Gly Leu Tyr Gln Gly
                165
                                    170
Phe Asn Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe
            180
                                185
Gly Ile Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Thr
                            200
                                                205
His Ile Val Ile Ser Trp Met Ile Ala Gln Thr Val Thr Ala Val Ala
                        215
                                            220
Gly Leu Thr Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met
                    230
                                        235
Gln Ser Gly Arg Lys Gly Thr Asp Ile Met Tyr Thr Gly Thr Leu Asp
                245
                                    250
Cys Trp Arg Lys Ile Ala Arg Asp Glu Gly Gly Lys Ala Phe Phe Lys
            260
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<212> PRT

<213> Homo sapien

<400> 33

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| Gly<br>225 | Val        | Val                          | Ser         | Tyr        | Pro<br>230 | Phe        | Asp        | Thr        | Val        | Arg<br>235 | Arg  | Arg        | Met        | Met        | Met<br>240 |       |          |
|------------|------------|------------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------|------------|------------|------------|------------|-------|----------|
|            | Ser        | Gly                          | Arg         | Lys<br>245 |            | Ala        | Asp        | Ile        | Met<br>250 |            | Thr  | Gly        | Thr        | Val<br>255 |            |       |          |
| Суѕ        | Trp        | Arg                          | Lys<br>260  |            | Phe        | Arg        | Asp        | Glu<br>265 |            | Gly        | Lys  | Ala        | Phe<br>270 |            | Lys        |       |          |
| Gly        | Ala        | Trp<br>275                   |             | Asn        | Val        | Leu        | Arg<br>280 | Gly        | Met        | Gly        | Gly  | Ala<br>285 |            | Val        | Leu        |       |          |
| Val        | Leu<br>290 |                              | Asp         | Glu        | Leu        | Lys<br>295 |            | Val        | Ile        |            |      | 200        |            |            |            |       |          |
|            | <2<br><2   | 210><br>211><br>212><br>213> | 41<br>DNA   | ifici      | ial S      | Seque      | ence       |            |            |            |      |            |            |            |            |       |          |
|            |            | 220><br>223>                 |             | mer i      |            |            |            | ifica<br>t | atio       | n of       | huma | an Al      | NT3 :      | for        |            |       |          |
| ttaa       |            | 100><br>tac (                |             | acgga      | aa ca      | aggco      | catc       | t cct      | ttcg       | ccaa       | a    |            |            |            |            |       | 41       |
|            | <2<br><2   | 210><br>211><br>212><br>213> | 42<br>DNA   | ifici      | ial S      | Seque      | ence       |            |            |            |      |            |            |            |            |       |          |
|            |            | 220><br>223>                 |             | mer i      |            |            |            | ifica<br>E | atio       | n of       | huma | an Al      | NT3 :      | for        |            |       |          |
| ttat       |            |                              |             | <br>gatca  |            |            | gag        | <br>c to   | gtcgi      | aca        | gg   |            |            |            |            | • • • | - 42     |
|            | <2<br><2   | 210><br>211><br>212><br>213> | 30<br>DNA   | ifici      | ial S      | Seque      | ence       |            |            |            |      |            |            | -          | -          |       |          |
|            |            | 220><br>223>                 | Prin        | ner 1      | for I      | PCR a      | ampli      | ifica      | ation      | n of       | EYF  | 9          |            |            |            |       |          |
| ggg        | <4<br>ccct | 100><br>:cg a                |             | ggtga      | ag ca      | aggg       | gcgag      | 3          |            |            |      |            |            |            |            |       | 30       |
|            |            | 210><br>211>                 | -           |            |            |            |            |            |            |            |      |            |            |            |            |       |          |
| • • •      | <2<br><2   | 212><br>213>                 | DNA<br>Arti | fici       | lal S      | Seque      | ènce       | T .        |            | -          |      |            |            |            |            |       | · ·. · » |
|            |            | 220><br>223>                 | Prin        | mer f      | For E      | PCR a      | ampli      | ifica      | ation      | n of       | EYFI | ?          |            |            |            |       |          |
| gggd       |            | 100><br>cta ç                |             | actto      | gt ac      | cagct      | cgt        | c cat      | =          |            |      |            |            |            |            |       | 33       |